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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,411	02/27/2002	Robert Stenberg	01-926 72242 (6653)	7376

7590 01/13/2004  
LSI Logic Corporation  
Corporate Legal Department  
Intellectual Property Services Group  
1551 McCarthy Blvd., M/S D-106  
Milpitas, CA 95035

EXAMINER
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DO, THUAN V

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/083,411

Applicant(s)

STENBERG ET AL.

Examiner

Thuan Do

Art Unit

2825

MLW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,9 and 19-34 is/are pending in the application.
- ✓ 4a) Of the above claim(s) 2-8 and 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,9,19 and 27 is/are rejected.
- 7) ☒ Claim(s) 20-26 and 28-34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s) 6.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_. 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This final office action is responsive to the amendment entered on 11/19/2003. Claims 1,9,19-34 are pending in this office action. Claims 2-8 and 10-18 are canceled.

The search found a prior art with the new ground rejection as following:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,9,19,27 are rejected under 35 U.S.C. 102(b) as being unpatentable over Tsay, Pat. No. 5461576.

**Regarding claim 1:** Tsay teaches a method comprising:

(a) placing and wiring an integrated circuit design (col. 1, lines 8-12);

(b) generating a slack graph of critical paths in the integrated circuit design (col. 2, lines 9-13) ;

(c) identifying bottlenecks in the critical paths (col. 13, line 59 through col. 14, line 6 where the bottlenecks which are identified as comparison of accumulated edge delay of nodes).

**Regarding claim 9:** This claim teaches a program for the same method of claim 1 and rejected as the same rationale.

**Regarding claims 19,27:** Tsay teaches the method and program with net comparison (col. 13, lines 29-39).

#### ***Allowable Subject Matter***

Claims 20-26 and 28-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the

Art Unit: 2825

limitations of the base claim and any intervening claims. The reason for allowance is that the prior art of record fails to teach the combination of dependent claims and all other features of independent claims.

### ***Response to Arguments***

3. Applicant's arguments have been considered but are not persuaded according to the following issues:

Applicant said that the prior art does not disclose the new feature of identifying bottlenecks.

The search found a prior art teaching that feature as indicated in above claim 1 rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### **CONTACT INFORMATION**

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 703-305-2362.

Art Unit: 2825

The examiner can normally be reached on Monday-Friday 8:30-5:30 (except 2nd Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.

TD

Thuan Do  
Patent examiner  
1/8/04

  
VUTHE SIEK  
PRIMARY EXAMINER